

Day : Monday  
Date: 6/20/2005

Time: 13:47:24

PALM INTRANET

## Content Information for 10/042605

Search Another: Application#  Search or Patent#  Search

PCT /  /  Search or PG PUBS #  Search

Attorney Docket #  Search

Bar Code #  Search

Appln Info	Contents	Petition Info	Atty/Agent Info	Continuity Data	Foreign Data
Date	Status	Code	Description		
04/24/2005		FWDX	DATE FORWARDED TO EXAMINER		
03/21/2005	71	ELC	RESPONSE TO ELECTION / RESTRICTION FILED		
03/09/2005	41	MCTRS	MAIL RESTRICTION REQUIREMENT		
03/07/2005	40	CTRS	REQUIREMENT FOR RESTRICTION / ELECTION		
02/09/2005		TSSCOMP	IFW TSS PROCESSING BY TECH CENTER COMPLETE		
01/31/2002		RCAP	REFERENCE CAPTURE ON IDS		
01/26/2005		DOCK	CASE DOCKETED TO EXAMINER IN GAU		
01/31/2002		M844	INFORMATION DISCLOSURE STATEMENT (IDS) FILED		
05/20/2002	30	DOCK	CASE DOCKETED TO EXAMINER IN GAU		
05/13/2002		TI1050	TRANSFER INQUIRY TO GAU		
04/22/2002	20	OIPE	APPLICATION DISPATCHED FROM OIPE		
04/10/2002		COMP	APPLICATION IS NOW COMPLETE		
03/26/2002		ADDFLFEE	ADDITIONAL APPLICATION FILING FEES		
03/26/2002		CORRDRW	APPLICANT HAS SUBMITTED NEW DRAWINGS TO CORRI		
02/13/2002		CPAP	CORRECTED PAPER		
01/23/2002		SCAN	IFW SCAN & PACR AUTO SECURITY REVIEW		
01/09/2002	19	IEXX	INITIAL EXAM TEAM NN		

Appln Info	Contents	Petition Info	Atty/Agent Info	Continuity Data	Foreign Data
------------	----------	---------------	-----------------	-----------------	--------------

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
1	IS&R	L1	2511	(382/159,173,181,190,220,224,225,226,305).CCLS.	USPAT	2005/06/20 14:09	
2	BRS	L2	1730	358/403	USPAT	2005/06/20 14:09	
3	BRS	L3	665	707/1-10	USPAT	2005/06/20 14:09	
4	BRS	L4	366	(semantic\$5 near10 (class\$9 or categor\$9)) and (certainty or reliability or confidence or similar\$5 or match\$3) and imag\$3	USPAT	2005/06/20 14:11	
5	BRS	L5	18	1 and 4	USPAT	2005/06/20 14:11	
6	BRS	L6	4	2 and 4	USPAT	2005/06/20 14:11	
7	BRS	L7	2	3 and 4	USPAT	2005/06/20 14:11	
8	BRS	L8	18	(semantic\$5 near10 (class\$9 or categor\$9)) same (extract\$5 near5 feature\$1)	USPAT	2005/06/20 14:11	
9	BRS	L10	1	1 and 8	USPAT	2005/06/20 14:12	
10	BRS	L12	1	3 and 8	USPAT	2005/06/20 14:13	
11	BRS	L11	1	2 and 8	USPAT	2005/06/20 14:13	

## Refine Search

### Search Results -

Terms	Documents
L14 and (time or date)	2

Database:

**US Pre-Grant Publication Full-Text Database**

US Patents Full-Text Database

US OCR Full-Text Database

EPO Abstracts Database

JPO Abstracts Database

Derwent World Patents Index

IBM Technical Disclosure Bulletins

Search:

L30

Refine Search

Recall Text

Clear

Interrupt

### Search History

DATE: Monday, June 20, 2005   [Printable Copy](#)   [Create Case](#)

<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
side by side			
<i>DB=PGPB,USPT; PLUR=YES; OP=ADJ</i>			
<u>L1</u>	semantic\$6 same measur\$6 same feature\$1 same class\$9	32	<u>L1</u>
<u>L2</u>	L1 same (categor\$7 or group\$5 or cluster\$3)	9	<u>L2</u>
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
<u>L3</u>	(group\$5 near3 imag\$3) same semantic\$6 same class\$9	12	<u>L3</u>
<u>L4</u>	(measur\$6 near3 (confidence or reliabil\$5 or certainty)) same imag\$3 same class\$6	27	<u>L4</u>
<u>L5</u>	(measur\$6 near3 (confidence or reliabil\$5 or certainty)) same imag\$3 same class\$8	27	<u>L5</u>
<u>L6</u>	L5 same semantic\$6	0	<u>L6</u>
<u>L7</u>	L5 and semantic\$6	0	<u>L7</u>
<u>L8</u>	(measur\$6 near3 (confidence or reliabil\$5 or certainty)) same (match\$3 or similar\$5)	553	<u>L8</u>
<u>L9</u>	L8 same image	56	<u>L9</u>

<u>L10</u>	(measur\$6 near3 (confidence or reliabil\$5 or certainty)) near3(match\$3 or similar\$5)	106	<u>L10</u>
<i>DB=PGPB; PLUR=YES; OP=ADJ</i>			
<u>L11</u>	general semantic theme	1	<u>L11</u>
<u>L12</u>	L11 and film\$1	1	<u>L12</u>
<u>L13</u>	visualizing collection near6 querying	2	<u>L13</u>
<u>L14</u>	L13 and film	2	<u>L14</u>
<u>L15</u>	L11 and support vector4	0	<u>L15</u>
<u>L16</u>	semantic theme and support	2	<u>L16</u>
<i>DB=PGPB,USPT,EPAB; PLUR=YES; OP=ADJ</i>			
<u>L17</u>	wedding and birthday and semantic\$5 and classif\$9	25	<u>L17</u>
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
<u>L18</u>	6351556.pn.	1	<u>L18</u>
<i>DB=PGPB; PLUR=YES; OP=ADJ</i>			
<u>L19</u>	l13 and brief	2	<u>L19</u>
<u>L20</u>	L19 and face	2	<u>L20</u>
<u>L21</u>	confidence near10 support	198	<u>L21</u>
<u>L22</u>	L21 and theme	12	<u>L22</u>
<u>L23</u>	L21 and (semantic\$5 near10 theme)	1	<u>L23</u>
<u>L24</u>	enhanced value near3 service	11	<u>L24</u>
<u>L25</u>	L24 and semantic\$6	2	<u>L25</u>
<u>L26</u>	produc\$5 near10 enhanced value near10 service	1	<u>L26</u>
<u>L27</u>	enhanced same value same product same service	60	<u>L27</u>
<u>L28</u>	enhanced same value same product same service	60	<u>L28</u>
<u>L29</u>	L28 same semantic\$6	1	<u>L29</u>
<u>L30</u>	L14 and (time or date)	2	<u>L30</u>

END OF SEARCH HISTORY


[Home](#) | [Login](#) | [Logout](#) | [Access Information](#) | [Alerts](#) |

Welcome United States Patent and Trademark Office

Search Results

[BROWSE](#)[SEARCH](#)[IEEE XPLORE GUIDE](#)

Results for "( semantic\*&lt;in&gt;ab ) &lt;and&gt; ( class\*&lt;in&gt;ab ) &lt;and&gt; ( imag\*&lt;in&gt;ab ) &lt;a..."

e-mail

Your search matched 7 of 1171917 documents.

A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order.

[» View Session History](#)[» New Search](#)

Modify Search

» Key

( semantic\*&lt;in&gt;ab ) &lt;and&gt; ( class\*&lt;in&gt;ab ) &lt;and&gt; ( imag\*&lt;in&gt;ab ) &lt;and&gt; ( outdoor &lt;img alt="search icon" data-bbox="795 255 810 270"/&gt;

IEEE JNL IEEE Journal or Magazine

☐ Check to search only within this results set

IEEE JNL IEE Journal or Magazine

Display Format: ☒ Citation ☐ Citation & Abstract

IEEE CNF IEEE Conference Proceeding

Select Article Information

IEEE CNF IEE Conference Proceeding

**1. Image classification for content-based indexing**Vailaya, A.; Figueiredo, M.A.T.; Jain, A.K.; Hong-Jiang Zhang;  
Image Processing, IEEE Transactions on  
Volume 10, Issue 1, Jan. 2001 Page(s):117 - 130[AbstractPlus](#) | [References](#) | Full Text: [PDF\(288 KB\)](#) IEEE JNL**2. Content-based hierarchical classification of vacation images**Vailaya, A.; Figueiredo, M.; Jain, A.; Hong Jiang Zhang;  
Multimedia Computing and Systems, 1999. IEEE International Conference on  
Volume 1, 7-11 June 1999 Page(s):518 - 523 vol.1[AbstractPlus](#) | Full Text: [PDF\(156 KB\)](#) IEEE CNF**3. Indoor vs outdoor classification of consumer photographs using low-level and s**Jiebo Luo; Savakis, A.;  
Image Processing, 2001. Proceedings. 2001 International Conference on  
Volume 2, 7-10 Oct. 2001 Page(s):745 - 748 vol.2[AbstractPlus](#) | Full Text: [PDF\(288 KB\)](#) IEEE CNF**4. Bayesian fusion of camera metadata cues in semantic scene classification**Boutell, M.; Luo, J.;  
Computer Vision and Pattern Recognition, 2004. CVPR 2004. Proceedings of the 2004  
Society Conference on  
Volume 2, 27 June-2 July 2004 Page(s):II-623 - II-630 Vol.2[AbstractPlus](#) | Full Text: [PDF\(601 KB\)](#) IEEE CNF**5. Combining a fuzzy rule-based classifier and illumination invariance for improved detection**Zeljko V.; Dorado, A.; Izquierdo, E.;  
Circuits and Systems for Video Technology, IEEE Transactions on  
Volume 14, Issue 11, Nov. 2004 Page(s):1277 - 1280[AbstractPlus](#) | [References](#) | Full Text: [PDF\(688 KB\)](#) IEEE JNL**6. Incorporating temporal context with content for classifying image collections**Boutell, M.; Luo, J.;  
Pattern Recognition, 2004. ICPR 2004. Proceedings of the 17th International Conferen  
Volume 2, 23-26 Aug. 2004 Page(s):947 - 950 Vol.2[AbstractPlus](#) | Full Text: [PDF\(542 KB\)](#) IEEE CNF

**7. Photo classification by integrating image content and camera metadata**

Boutell, M.; Jiebo Luo;

Pattern Recognition, 2004. ICPR 2004. Proceedings of the 17th International Conferen  
Volume 4, 23-26 Aug. 2004 Page(s):901 - 904 Vol.4[AbstractPlus](#) | Full Text: [PDF](#)(458 KB) IEEE CNFIndexed by  
 Inspec\*[Help](#) [Contact Us](#) [Privacy & ;](#)

© Copyright 2005 IEEE ~


[Home](#) | [Login](#) | [Logout](#) | [Access Information](#) | [Alerts](#)

Welcome United States Patent and Trademark Office

Search Results

[BROWSE](#)[SEARCH](#)[IEEE XPLORE GUIDE](#)

Results for "( semantic\*&lt;in&gt;ab ) &lt;and&gt; ( class\*&lt;in&gt;ab ) &lt;and&gt; ( imag\*&lt;in&gt;ab )"

Your search matched 134 of 1171917 documents.

A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order.

e-mail

[» View Session History](#)[» New Search](#)

Modify Search

☐ Check to search only within this results setDisplay Format: ☒ Citation ☐ Citation & Abstract[IEEE JNL](#) IEEE Journal or Magazine[IEEE JNL](#) IEEE Journal or Magazine[IEEE CNF](#) IEEE Conference Proceeding[IEEE CNF](#) IEEE Conference Proceeding[IEEE STD](#) IEEE Standard

Select Article Information

View: [1-25](#) | [26-5](#)

- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | <p><b>1. Learning bayesian classifiers for scene classification with a visual grammar</b><br/> Aksoy, S.; Koperski, K.; Tusk, C.; Marchisio, G.; Tilton, J.C.;<br/> Geoscience and Remote Sensing, IEEE Transactions on<br/> Volume 43, Issue 3, Mar 2005 Page(s):581 - 589<br/> <a href="#">AbstractPlus</a>   Full Text: <a href="#">PDF</a>(2976 KB) <a href="#">IEEE JNL</a></p> |
| <input type="checkbox"/> | <p><b>2. Adaptive packet video streaming over IP networks: a cross-layer approach</b><br/> Ahmed, T.; Mehaoua, A.; Boutaba, R.; Iraqi, Y.;<br/> Selected Areas in Communications, IEEE Journal on<br/> Volume 23, Issue 2, Feb 2005 Page(s):385 - 401<br/> <a href="#">AbstractPlus</a>   Full Text: <a href="#">PDF</a>(1816 KB) <a href="#">IEEE JNL</a></p>                       |
| <input type="checkbox"/> | <p><b>3. A multiresolution manifold distance for invariant image similarity</b><br/> Vasconcelos, N.; Lippman, A.;<br/> Multimedia, IEEE Transactions on<br/> Volume 7, Issue 1, Feb. 2005 Page(s):127 - 142<br/> <a href="#">AbstractPlus</a>   Full Text: <a href="#">PDF</a>(2088 KB) <a href="#">IEEE JNL</a></p>  |
| <input type="checkbox"/> | <p><b>4. A knowledge-based approach for retrieving images by content</b><br/> Chih-Cheng Hsu; Chu, W.W.; Taira, R.K.;<br/> Knowledge and Data Engineering, IEEE Transactions on<br/> Volume 8, Issue 4, Aug. 1996 Page(s):522 - 532<br/> <a href="#">AbstractPlus</a>   <a href="#">References</a>   Full Text: <a href="#">PDF</a>(2620 KB) <a href="#">IEEE JNL</a></p>            |
| <input type="checkbox"/> | <p><b>5. Adaptive split-and-merge segmentation based on piecewise least-square approx</b><br/> Wu, X.;<br/> Pattern Analysis and Machine Intelligence, IEEE Transactions on<br/> Volume 15, Issue 8, Aug. 1993 Page(s):808 - 815<br/> <a href="#">AbstractPlus</a>   Full Text: <a href="#">PDF</a>(792 KB) <a href="#">IEEE JNL</a></p>   |
| <input type="checkbox"/> | <p><b>6. Direct visualization of volume data</b><br/> Yoo, T.S.; Neumann, U.; Fuchs, H.; Pizer, S.M.; Cullip, T.; Rhoades, J.; Whitaker, R.;<br/> Computer Graphics and Applications, IEEE<br/> Volume 12, Issue 4, July 1992 Page(s):63 - 71<br/> <a href="#">AbstractPlus</a>   Full Text: <a href="#">PDF</a>(1316 KB) <a href="#">IEEE JNL</a></p>                               |

- ☐ **7. A flexible tool for prototyping ALV road following algorithms**  
Dickinson, S.J.; Davis, L.S.;  
Robotics and Automation, IEEE Transactions on  
Volume 6, Issue 2, April 1990 Page(s):232 - 242  
[AbstractPlus](#) | [Full Text: PDF\(1268 KB\)](#) IEEE JNL
  
- ☐ **8. Image coding-from waveforms in animation**  
Forchheimer, R.; Kronander, T.;  
Acoustics, Speech, and Signal Processing [see also IEEE Transactions on Signal Proc  
Transactions on  
Volume 37, Issue 12, Dec. 1989 Page(s):2008 - 2023  
[AbstractPlus](#) | [Full Text: PDF\(1624 KB\)](#) IEEE JNL
  
- ☐ **9. Combining a fuzzy rule-based classifier and illumination invariance for improved detection**  
Zeljko, V.; Dorado, A.; Izquierdo, E.;  
Circuits and Systems for Video Technology, IEEE Transactions on  
Volume 14, Issue 11, Nov. 2004 Page(s):1277 - 1280  
[AbstractPlus](#) | [References](#) | [Full Text: PDF\(688 KB\)](#) IEEE JNL
  
- ☐ **10. Statistical modeling and conceptualization of visual patterns**  
Song-Chun Zhu;  
Pattern Analysis and Machine Intelligence, IEEE Transactions on  
Volume 25, Issue 6, June 2003 Page(s):691 - 712  
[AbstractPlus](#) | [References](#) | [Full Text: PDF\(4330 KB\)](#) IEEE JNL
  
- ☐ **11. CBSA: content-based soft annotation for multimodal image retrieval using Bayes**  
Chang, E.; Kingshy Goh; Sychay, G.; Gang Wu;  
Circuits and Systems for Video Technology, IEEE Transactions on  
Volume 13, Issue 1, Jan. 2003 Page(s):26 - 38  
[AbstractPlus](#) | [References](#) | [Full Text: PDF\(1298 KB\)](#) IEEE JNL
  
- ☐ **12. SemQuery: semantic clustering and querying on heterogeneous features for visu**  
Sheikholeslami, G.; Chang, W.; Aidong Zhang;  
Knowledge and Data Engineering, IEEE Transactions on  
Volume 14, Issue 5, Sept.-Oct. 2002 Page(s):988 - 1002  
[AbstractPlus](#) | [References](#) | [Full Text: PDF\(811 KB\)](#) IEEE JNL
  
- ☐ **13. A hierarchical human detection system in (un)compressed domains**  
Burak Ozer, I.; Wolf, W.H.;  
Multimedia, IEEE Transactions on  
Volume 4, Issue 2, June 2002 Page(s):283 - 300  
[AbstractPlus](#) | [References](#) | [Full Text: PDF\(1167 KB\)](#) IEEE JNL
  
- ☐ **14. Image classification for content-based indexing**  
Vailaya, A.; Figueiredo, M.A.T.; Jain, A.K.; Hong-Jiang Zhang;  
Image Processing, IEEE Transactions on  
Volume 10, Issue 1, Jan. 2001 Page(s):117 - 130  
[AbstractPlus](#) | [References](#) | [Full Text: PDF\(288 KB\)](#) IEEE JNL
  
- ☐ **15. SIMPLiCity: semantics-sensitive integrated matching for picture libraries**  
Wang, J.Z.; Jia Li; Wiederhold, G.;  
Pattern Analysis and Machine Intelligence, IEEE Transactions on  
Volume 23, Issue 9, Sept. 2001 Page(s):947 - 963  
[AbstractPlus](#) | [References](#) | [Full Text: PDF\(2192 KB\)](#) IEEE JNL
  
- ☐ **16. Real-time video-shot detection for scene surveillance applications**

Stringa, E.; Regazzoni, C.S.;  
Image Processing, IEEE Transactions on  
Volume 9, Issue 1, Jan. 2000 Page(s):69 - 79  
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(256 KB) IEEE JNL

- ☐ **17. Multimedia content analysis-using both audio and visual clues**  
Yao Wang; Zhu Liu; Jin-Cheng Huang;  
Signal Processing Magazine, IEEE  
Volume 17, Issue 6, Nov. 2000 Page(s):12 - 36  
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(1848 KB) IEEE JNL
- ☐ **18. Region-based representations of image and video: segmentation tools for multin**  
Salembier, P.; Marques, F.;  
Circuits and Systems for Video Technology, IEEE Transactions on  
Volume 9, Issue 8, Dec. 1999 Page(s):1147 - 1169  
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(1000 KB) IEEE JNL
- ☐ **19. High-performance compression of visual information-a tutorial review. I. Still pict**  
Egger, O.; Fleury, P.; Ebrahimi, T.; Kunt, M.;  
Proceedings of the IEEE  
Volume 87, Issue 6, June 1999 Page(s):976 - 1013  
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(1740 KB) IEEE JNL
- ☐ **20. Knowledge-based image retrieval with spatial and temporal constructs**  
Chu, W.W.; Chih-Cheng Hsu; Cardenas, A.F.; Taira, R.K.;  
Knowledge and Data Engineering, IEEE Transactions on  
Volume 10, Issue 6, Nov.-Dec. 1998 Page(s):872 - 888  
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(2732 KB) IEEE JNL
- ☐ **21. Content-based indexing of multimedia databases**  
Jian-Kang Wu;  
Knowledge and Data Engineering, IEEE Transactions on  
Volume 9, Issue 6, Nov.-Dec. 1997 Page(s):978 - 989  
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(428 KB) IEEE JNL
- ☐ **22. Synthesis of Dynamic Class Loading Specifications on Reconfigurable Hardware**  
Agosta, G.; Bruschi, F.; Sciuto, D.;  
Electronic Design, Test and Applications, 2004. DELTA 2004. Second IEEE Internation  
28-30 Jan. 2004 Page(s):431 - 431  
[AbstractPlus](#) | Full Text: [PDF](#)(112 KB) IEEE CNF
- ☐ **23. Data structures and algorithms for graph based remote sensed image content st  
retrieval**  
Grant, C.W.;  
Geoscience and Remote Sensing Symposium, 2004. IGARSS '04. Proceedings. 2004  
International  
Volume 3, 2004 Page(s):2159 - 2162 vol.3  
[AbstractPlus](#) | Full Text: [PDF](#)(351 KB) IEEE CNF
- ☐ **24. Semantics-based satellite image retrieval using low-level features**  
Li, Y.; Bretschneider, T.;  
Geoscience and Remote Sensing Symposium, 2004. IGARSS '04. Proceedings. 2004  
International  
Volume 7, 2004 Page(s):4406 - 4409 vol.7  
[AbstractPlus](#) | Full Text: [PDF](#)(332 KB) IEEE CNF
- ☐ **25. The Princeton Shape Benchmark**

Shilane, P.; Min, P.; Kazhdan, M.; Funkhouser, T.;  
Shape Modeling Applications, 2004. Proceedings  
2004 Page(s):167 - 178

[AbstractPlus](#) | Full Text: [PDF](#)(443 KB) [IEEE CNF](#)



View: [1-25](#) | [26-5](#)

Indexed by  
 Inspec®

[Help](#) [Contact Us](#) [Privacy &](#)

© Copyright 2005 IEEE -


[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: ☒ The ACM Digital Library ☐ The Guide

(semantic\* &lt;near/2&gt; class\*) &lt;sentence&gt; confidence\*



THE ACM DIGITAL LIBRARY


[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

 Terms used **semantic near/2 class**

 Found **27,422** of **156,259**

Sort results by

relevance


[Save results to a Binder](#)
[Try an Advanced Search](#)

Display results

expanded form


[Search Tips](#)
[Try this search in The ACM Guide](#)
☐ Open results in a new window

Results 1 - 20 of 200

 Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

 Relevance scale ☐ ☐ ☐ ☐ ☐

### 1 [Image and video digital libraries: Semantic video classification and feature subset selection under context and concept uncertainty](#)

Jianping Fan, Hangzai Luo, Jing Xiao, Lide Wu

 June 2004 **Proceedings of the 4th ACM/IEEE-CS joint conference on Digital libraries**

 Full text available: [pdf\(258.04 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

As large collections of videos become one key component of digital libraries, there is an urgent need of semantic video classification and feature subset selection to enable more effective video database organization and retrieval. However, most existing techniques for classifier training require a large number of labeled samples to learn correctly and suffer from the problems of context and concept uncertainty when only a limited number of labeled samples are available. To address the problems ...

**Keywords:** adaptive EM algorithm, context and concept uncertainty, semantic video classification, unlabeled samples

### 2 [Video retrieval: Semantic video classification by integrating flexible mixture model with adaptive EM algorithm](#)

Jianping Fan, Hangzai Luo, Xiaodong Lin

 November 2003 **Proceedings of the 5th ACM SIGMM international workshop on Multimedia information retrieval**

 Full text available: [pdf\(631.43 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Digital video now plays an important role in medical education and healthcare, but our ability to automatic video indexing at semantic level is currently primitive. In this paper, we propose a novel framework to enable more effective semantic video classification and indexing in a specific surgery education video domain. Specifically, this framework includes: (a) A novel semantic-sensitive video content characterization and representation framework by using **principal video shots** and th ...

**Keywords:** adaptive EM algorithm, flexible mixture model, principal video shots, semantic video classification

### 3 [Class analyses as abstract interpretations of trace semantics](#)

Fausto Spoto, Thomas Jensen

September 2003 **ACM Transactions on Programming Languages and Systems (TOPLAS)**,

Volume 25 Issue 5

Full text available:  [pdf\(756.68 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We use abstract interpretation to abstract a compositional trace semantics for a simple imperative object-oriented language into its projection over a set of program points called *watchpoints*. We say that the resulting *watchpoint semantics* is *focused* on the watchpoints. Every abstraction of the computational domain of this semantics induces an abstract, still compositional, and focused watchpoint semantics. This establishes a basis for developing static analyses obtaining in ...

**Keywords:** Abstract interpretation, class analysis, denotational semantics

#### 4 [Structure and semantics in OODB class specifications](#)

J. Geller, Y. Perl, E. J. Neuhold

December 1991 **ACM SIGMOD Record**, Volume 20 Issue 4

Full text available:  [pdf\(438.37 KB\)](#) Additional Information: [full citation](#), [abstract](#), [index terms](#)

A class specification contains both structural aspects and semantic aspects. We introduce a mathematically based distinction between structural and semantic aspects. We show how this distinction is used to identify all structural aspects of a class specification to be included in the object type of a class. The model obtained is called the Dual Model due to the separation of structure and semantics in the class specification. Advantages of the separation of structure an ...

#### 5 [Automatic semantic classification for Chinese unknown compound nouns](#)

Keh-Jiann Chen, Chao-jan Chen

July 2000 **Proceedings of the 17th conference on Computational linguistics - Volume 1**

Full text available:  [pdf\(642.82 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

The paper describes a similarity-based model to present the morphological rules for Chinese compound nouns. This representation model serves functions of 1) as the morphological rules of the compounds, 2) as a mean to evaluate the properness of a compound construction, and 3) as a mean to disambiguate the semantic ambiguity of the morphological head of a compound noun. An automatic semantic classification system for Chinese unknown compounds is thus implemented based on the model. Experiments an ...

#### 6 [Learning primitive and scene semantics of images for classification and retrieval](#)

Cheong Yiu Fung, Kai Fock Loe

October 1999 **Proceedings of the seventh ACM international conference on Multimedia (Part 2)**

Full text available:  [pdf\(724.15 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

**Keywords:** image retrieval, image semantics, machine learning

#### 7 [Video II: Concept-oriented video skimming and adaptation via semantic classification](#)

Hangzai Luo, Jianping Fan

October 2004 **Proceedings of the 6th ACM SIGMM international workshop on Multimedia information retrieval**

Full text available:  [pdf\(1.35 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Concept-oriented video skimming and adaptation plays an important role in enabling online medical education by selecting and transmitting the suitable medical video clips to the


students over network. In this paper, we propose a novel framework to enable concept-oriented video skimming and adaptation in a specific domain of medical education video. Specifically, this framework includes: (a) A novel semantic-sensitive framework for video content characterization and representation by using pri ...

**Keywords:** concept-oriented video skimming and adaptation, semantic video classification

# 8 Semantics of type classes revisited

Satish R. Thatté

July 1994 **ACM SIGPLAN Lisp Pointers , Proceedings of the 1994 ACM conference on LISP and functional programming**, Volume VII Issue 3

Full text available:  pdf(1.10 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We present a new approach to the semantics of languages with ML-like polymorphic types and type classes. The goals of the new approach are simplicity and generality. Our typing rules are a relatively straightforward extension of the rules for translating core-ML to core-XML. The new features are an encoding of classes as recursive sets of types, and class-membership constraints on types. We show that the soundness of this type of system is independent of the fixedpoint operator used to inte ...

# 9 Poster Sessions: Constructing verb semantic classes for French: methods and evaluation

Patrick Saint-Dizier

August 1996 **Proceedings of the 16th conference on Computational linguistics - Volume 2**

Full text available:  pdf(408.58 KB)


Additional Information: [full citation](#), [abstract](#), [references](#)

In this paper, we study a reformulation, which is better adapted to NLP, of the alternation system developed for English by B. Levin. We have studied a set of 1700 verbs from which we explain how verb semantic classes can be built in a systematic way. The quality of the results w.r.t. semantic classifications such as WordNet is then evaluated.

# 10 Semantic analysis of virtual classes and tested classes

Ole Lehrmann Madsen

October 1999 **ACM SIGPLAN Notices , Proceedings of the 14th ACM SIGPLAN conference on Object-oriented programming, systems, languages, and applications**, Volume 34 Issue 10

Full text available:  pdf(1.82 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Virtual classes and nested classes are distinguishing features of BETA. Nested classes originated from Simula, but until recently they have not been part of main stream object-oriented languages. C++ has a restricted form of nested classes and they were included in Java 1.1. Virtual classes is the BETA mechanism for expressing generic classes and virtual classes is an alternative to parameterized classes. There has recently been an increasing interest in virtual classes and a number of pro ...

**Keywords:** generic class, parameterized class, semantic analysis, virtual class

# 11 Software engineering #1: Towards a semantic-based approach for software reusable component classification and retrieval

Haining Yao, Letha Etzkorn

April 2004 **Proceedings of the 42nd annual Southeast regional conference**

Full text available:  pdf(216.97 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In this paper, we propose a semantic-based approach to improve software component reuse. The whole approach extends the software reusable library to the World Wide Web; overcomes the keyword-based barrier by allowing user queries in natural language; treats a software component as a service described by semantic service representation format; enhances the retrieval by semantically matching between a user query semantic representation and software component semantic descriptions against a domain ...

**Keywords:** domain knowledge base, ontology, reusable library, reuse repository, semantic matchmaking, system develop

12 [Modelling the Internet: On characterizing affinity and its impact on network performance](#) 

Gabriel Lucas, Abhishek Ghose, John Chuang

August 2003 **Proceedings of the ACM SIGCOMM workshop on Models, methods and tools for reproducible network research**


Full text available:  pdf(236.10 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

An important component of simulation-based network research is the selection of nodes to a member group, such as receivers in a multicast group or web clients in a content delivery network. In a seminal paper, Philips *et al.* introduce an algorithm for generating member groups with different degrees of affinity (clusteredness) and show that affinity can have a significant effect on multicast efficiency. Subsequent studies applying this algorithm have all used the algorithm's input paramete ...

13 [Tools for integrating and querying web information: OntoKhoj: a semantic web portal for ontology searching, ranking and classification](#) 

Chintan Patel, Kaustubh Supekar, Yugyung Lee, E. K. Park

November 2003 **Proceedings of the 5th ACM international workshop on Web information and data management**

Full text available:  pdf(80.44 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The goal of the next generation Web is to build virtual communities, wherein software agents and people can work in cooperation by sharing knowledge. To achieve this goal, the emerging Semantic Web community has proposed ontologies to express knowledge in a machine understandable way. The process of building and maintaining ontologies, which is known as Ontology Engineering, presents unique challenges. These challenges are related to lack of trustworthy and authoritative knowledge sources and ab ...

**Keywords:** classification, ranking, searching, semantic web

14 [Semantic vs. structural resemblance of classes](#) 

Peter Fankhauser, Martin Kracker, Erich J. Neuhold

December 1991 **ACM SIGMOD Record**, Volume 20 Issue 4

Full text available:  pdf(521.96 KB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

We present an approach to determine the similarity of classes which utilized fuzzy and incomplete terminological knowledge together with schema knowledge. We clearly distinguish between semantic similarity determining the degree of resemblance according to real world semantics, and structural correspondence explaining how classes can actually be interrelated. To compute the semantic similarity

15 [Technical poster session 1: multimedia analysis, processing, and retrieval: An online-optimized incremental learning framework for video semantic classification](#) 

Jun Wu, Xian-Sheng Hua, Hong-Jiang Zhang, Bo Zhang

October 2004 **Proceedings of the 12th annual ACM international conference on Multimedia**

Full text available:  pdf(156.75 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)


This paper considers the problems of feature variation and concept uncertainty in typical learning-based video semantic classification schemes. We proposed a new online semantic classification framework, termed OOIL (for Online-Optimized Incremental Learning), in which two sets of optimized classification models, local and global, are online trained by sufficiently exploiting both local and global statistic characteristics of videos. The global models are pre-trained on a relatively small set ...

**Keywords:** concept drifting, incremental learning, video analysis, video semantic classification

16 Demonstration session 2: A unified framework for semantic shot classification in sports videos 

Ling-Yu Duan, Min Xu, Xiao-Dong Yu, Qi Tian

December 2002 **Proceedings of the tenth ACM international conference on Multimedia**

Full text available:  pdf(254.16 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)


In this demonstration, we present a unified framework for semantic shot classification in sports videos. Unlike previous approaches, which focus on clustering by aggregating shots with similar low-level features, the proposed scheme makes use of domain knowledge of specific sport to perform a top-down video shot classification, including identification of video shots classes for each sport, and supervised learning and classification of given sports video with low-level and middle-level features ...

**Keywords:** classification, semantics, shot, sports, television, video

17 Extracting classification knowledge of Internet documents with mining term associations: a semantic approach 

Shian-Hua Lin, Chi-Sheng Shih, Meng Chang Chen, Jan-Ming Ho, Ming-Tat Ko, Yueh-Ming Huang

August 1998 **Proceedings of the 21st annual international ACM SIGIR conference on Research and development in information retrieval**

Full text available:  pdf(1.02 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

18 Semantics and the syntactic classification of words 

Ernst von Glasersfeld

September 1969 **Proceedings of the 1969 conference on Computational linguistics**

Full text available:  pdf(653.90 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

Traditional grammars classify words according to generic syntactic functions or morphological characteristics. For teaching humans and for descriptive linguistics this seemed sufficient. The advent of computers has changed the situation. Since machines are devoid of experiential knowledge, they need a more explicit grammar to handle natural language. Correlational Grammar is an attempt in that direction. The paper describes parts of correlational syntax and shows how a highly differentiated synt ...

19

Posters: Semantic video classification by integrating unlabeled samples for classifier 

training

Jianping Fan, Hangzai Luo

July 2004 **Proceedings of the 27th annual international conference on Research and development in information retrieval**Full text available:  pdf (120.02 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Semantic video classification has become an active research topic to enable more effective video retrieval and knowledge discovery from large-scale video databases. However, most existing techniques for classifier training require a large number of hand-labeled samples to learn correctly. To address this problem, we have proposed a semi-supervised framework to achieve incremental classifier training by integrating a limited number of labeled samples with a large number of unlabeled samples. Spec ...

**Keywords:** adaptive EM algorithm, finite mixture models, semantic video classification, unlabeled samples

20 Session 7A: Hierarchies for semantic classes

Lance Fortnow, Rahul Santhanam, Luca Trevisan

May 2005 **Proceedings of the thirty-seventh annual ACM symposium on Theory of computing**Full text available:  pdf (193.51 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We show that for any constant  $a$ ,  $ZPP/b(n)$  strictly contains  $ZPTIME(n^a)/b(n)$  for some  $b(n) = O(\log n \log \log n)$ . Our techniques are very general and give the same hierarchy for all common semantic time classes including  $RTIME$ ,  $NTIME$ ,  $coNTIME$ ,  $UTIME$ ,  $MATIME$ ,  $AMTIME$  and  $BQTIME$ . We show a stronger hierarchy for  $RTIME$ : For every constant  $c$ ,  $RP/1$  is not contained in  $RTIME(n^c)/(\log n)^{1/2^c}$ . To prove this result we first prove a similar statement for  $NP$  by building ...

**Keywords:** advice, hierarchy theorems, semantic classes

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2005 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)
Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)